

**Aquatic Classification Framework Hierarchy for the Upper Missouri River Aquatic Zoogeographic Unit (following Higgins et al. 2005).**

Click on the link to see more details at that level.

<b>Level</b>	<b>Examples</b>	<b>Description</b>	<b>Separation Factors</b>
<b>Ecoregion</b>	1) Northwestern Great Plains 2) Northern Glaciated Plains	Similar climate and physiography that corresponds to broad vegetation regions	Glaciated vs. non-glaciated landscape
<b>Ecological Drainage Units (EDU)</b>	1) Lower Yellowstone River 2) Upper Yellowstone River 3) Milk River /Marias/ Glaciated-Lower Missouri 4) Missouri Headwaters (Madison, Jefferson, Gallatin), 5) Little Missouri	Aggregates of watersheds that share ecological, biological, and aquatic zoogeographical characteristics. Stratification units are 8-digit HUC's as defined by the USGS. Within each EDU there is a regional subset of aquatic ecosystem types	Physiography, zoogeography, watershed
<a href="#"><u>Aquatic Ecological Systems (AES)</u></a>	1) Medium sized perennial prairie streams. 2) Small transitional foothills streams 3) Large intermontane river systems, direct tributaries to the Missouri	Hydrological subunits of EDU's. Defined by landscape position of a stream size-class within 1 or 2 stream orders that represent a dynamic assemblage of aquatic communities	Size, drainage network position, connectivity, hydrologic regime, geology
<b>Macrohabitat Type (Class_code)</b>	1) Meandering, low gradient, riffle/pool plains stream 2) Medium gradient, foothills beaver-pond influenced stream	Different valley segment types of stream reaches (think stream reach of 30km), within segments, relative homogeneous. Finest scale classification unit on the maps.	Surficial geology, drainage network position, connectivity, hydrologic regime, geology
<b>Community Species Assemblages (SPA)</b>	1) Warm-water, low-gradient plains stream community. 2) Transitional, foothills-plains aquatic community	Coarse level of biological community organization. Corresponds spatially to Aquatic Ecological Systems.	Taxa that are diagnostic of groups or associations (e.g. cold-water stenotherms, tolerant warm-water stream fish)
<b>Associations</b>	1) Headwater plains riffle community 2) Headwater prairie pool fish communities	Finest scale of classification. Corresponds spatially to within macrohabitat units.	Repeating, distinct species assemblages